CLAIMS

1.   A precedence determination system, comprising:

a first type memory bank configured to receive a first search signal and to provide a plurality of first search result indications;

a second type memory bank configured to receive a second search signal and to provide a plurality of second search result indications;

a precedence number table coupled to the first and second type memory banks and configured to provide a plurality of programmable precedence numbers; and

a precedence determination circuit coupled to the first and second type memory banks and the precedence number table and configured to provide a third search result indication.

2.   The precedence determination system of claim 1, wherein:

the first type memory bank includes static random access memory (SRAM).

3.   The precedence determination system of claim 1, wherein:

the second type memory bank includes ternary content addressable memory (TCAM).

4.   The precedence determination system of claim 2, wherein:

the first type memory bank includes a plurality of entries.

5.   The precedence determination system of claim 3, wherein:

the first type memory bank includes a plurality of entries.

6.   The precedence determination system of claim 1, wherein:

the first search signal includes a hash function signal.

7.   The precedence determination system of claim 1, wherein:

the second search signal includes a search key.

8.   The precedence determination system of claim 4, wherein:

each of the plurality of entries is configured to select one of the plurality of programmable precedence numbers.

9.   The precedence determination system of claim 5, wherein:

each of the plurality of entries is configured to select one of the plurality of programmable precedence numbers.

10.   The precedence determination system of claim 6, wherein:
        each of the plurality of first search result indications includes a hit or miss indication in response to the hash function signal.

11.   The precedence determination system of claim 7, wherein:
        each of the plurality of second search result indications includes at most one hit indication in response to the search key.

12.   The precedence determination system of claim 11, wherein:
        the at most one hit indication is provided in response to a physical address based precedence.

13.   The precedence determination system of claim 1, wherein:
        the third search result indication includes an overall hit or miss indication.

14.   The precedence determination system of claim 13, wherein:
        the overall miss indication includes a default precedence value.

15.   A method of determining a precedence, comprising the steps of:
        searching a first type memory to provide a plurality of first search results;
        searching a second type memory to provide a plurality of second search results;
        selecting a plurality of precedence numbers from a precedence number table in response to the first and second search results;
        determining a precedence in response to the plurality of precedence numbers; and
        providing a third search result.

16.   The method of determining the precedence of claim 15, wherein:
        the first type memory includes static random access memory (SRAM).

17.   The method of determining the precedence of claim 15, wherein:
        the second type memory includes ternary content addressable memory (TCAM).

18.   The method of determining the precedence of claim 15, wherein:

the steps of searching the first type memory and searching the second type memory are performed substantially in parallel.

19.   The method of determining the precedence of claim 15, wherein:

the third search result includes an overall hit or miss indication.

20.   The method of determining the precedence of claim 19, wherein:

the overall miss indication includes a default precedence value.

21.   The method of determining the precedence of claim 15, wherein:

the plurality of precedence numbers are programmable.

22.   A means for determining a precedence, comprising:

a means for searching a first type memory to provide a plurality of first search results;

a means for searching a second type memory to provide a plurality of second search results;

a means for selecting a plurality of precedence numbers from a precedence number table in response to the first and second search results;

a means for determining a precedence in response to the plurality of precedence numbers; and

a means for providing a third search result.